### Justification for Other Than Full and Open Competition (Limited or Sole Source Justification) (Refer to FAR 6.303-2 for further guidance on information to be provided)

### Subject of Justification - Riverware Support Services

US Department of Interior, Bureau of Reclamation Upper Colorado Region Acquisition Management Division Salt Lake City, UT

1- Office requesting the action	
Water Resources Group, Salt Lake Regional Office	•
2 Description of proposed action	
2- Description of proposed action  Mark one.	
main one.	
<b>X</b> sole source acquisition	limited competition acquisition
3- Description of services or supplies needed	
Software Enhancements and Technical Support Serv modeling software. These requirements are anticipa University of Colorado's Center for Advanced Decis (CADSWES). The contract type is anticipated to be performance will be for one (1) year with two (2) op	ted to be acquired via a 3-year contract with the sion Support for Water and Environmental Systems firm-fixed price. The contract's period of
4- Estimated cost	\$ 294,000.00 (\$98,000 per year over 3 years)
5- Authority	
Mark the primary basis for the proposed action.	
X FAR 6.302-1 Only one responsible source FAR 6.302-2 Unusual and compelling urgency FAR 6.302-3 Industrial mobilization, engineering, development or research capability; or expert services	FAR 6.302-4 International agreement FAR 6.302-5 Authorized or required by statute FAR 6.302-6 National security FAR 6.302-7 Public interest (Requires determination by the Agency Head.)
5a- Address specifically how the authority ap	plies
State conditions related to the requirement, contracted and "Limitation" portion of the applicable FAR citation	or(s) qualifications; etc. (Refer to the "Application"
In accordance with FAR6.302-1(b)(2), it is necessary due to[t]he existence of limited rights in data" rend CADSWES. Although Riverware is proprietary soft licensed, and maintained by the University of Colora Water and Environmental Systems (CADSWES), the and license-free unlimited rights to use the software. the source code for Riverware to compete the aforem has an equivalent product or the capabilities to develop product within an acceptable timeframe at a reasonab skills, knowledge, and access to the proprietary River and technical statements and technical statements.	dering the support services to be available only from tware which is physically and legally owned, do's Center for Advanced Decision Support for Bureau of Reclamation has been granted royalty However, it does not have the unlimited right to use tentioned requirements. No other potential offeror op a backward- compatible replacement software ole cost. In addition, no other firm has the expertise, rware source code required to ensure performance of

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### 6- Effort made to obtain offers from multiple sources

Name the source(s) from which the product(s) or service(s) are to be acquired. Be sure to include discussion as to which exception under 5.202 applies if publicizing is not intended. (This would only apply to actions under the FAR authorities 6.302-2, -3, -5, and -7.)

University of Colorado's Center for Advanced Decision Support for Water and Environmental Systems (CADSWES).

### 7- Description of market research performed

Explain actions taken and provide (by attachment) documentation of results of the market research, or an explanation of why no market research was done.

No market research was performed because, without CADSWES' consent for Reclamation to allow other firms to use Riverware proprietary software code, it would be impossible for any other vendor to successfully perform to Reclamation's requirements without authorized access to such code.

### 8- Determination of fair and reasonable cost

Explain how we know or will be able to determine reasonableness of costs.

In accordance with FAR 15.404, a cost and price analysis will be performed on CADSWES' proposal. Reclamation has an extensive procurement history with CADSWES, which will contribute to such analyses. In addition, other firms which provide similar services via the GSA Advantage market often include hourly rates for software support in their GSA schedules, which can be used for comparison purposes.

### 9- Other facts supporting use of other than full and open competition

Address applicable items such as why specifications, statement of work, etc., are not or cannot be available timely; harm, financial or otherwise, to the Gov't if not procured as proposed, etc.

Since 1994, Reclamation, Tennessee Valley Authority, U.S. Army Corps of Engineers, and CADSWES have cooperatively engaged in the development of decision support systems for watershed and river systems management. A major outcome of that effort is a generic reservoir and river systems modeling tool, known as Riverware.

Previous to the development of the Riverware software, Reclamation used an assortment of FORTRAN coded modeling programs. These programs were primarily developed in-house by Reclamation Hydraulic Engineers during the 1970's and 80's for very specific reservoir operations, such as the 'Colorado River Simulation System' (CRSS). Over time the cost for updating and maintaining these models became more and more difficult and costly, especially as the original program engineers were no longer available. Another problem with these older models was that operating rules were hard-coded within the model and were therefore extremely cumbersome to change for environmental or other purposes. The approximate cost to the Upper Colorado Region for just maintaining one of these models, CRSS, to the Denver Office during this time frame was nearly \$150,000 per year in 1993 dollars.

Since 1996, Riverware has been used to develop replacement models for many of the older and more obsolete FORTRAN models. It is now the core modeling tool used in the day-to-day, mid-range, and long-term reservoir operation studies of the Upper Colorado Region. In addition, it is the key resource

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by which data and information in support of critical, politically sensitive, and high-visibility water management decisions by high-level Bureau officials is obtained.

Reclamation has invested significant sums of money into the development, enhancement, and customizing of Riverware. To attempt to switch to another modeling software would have adverse impacts on Reclamation's ability to fufill its mission of managing water resources for the following reasons:

- 1. **Funding challenges:** It would require a vast reinvestment of money, which is currently unavailable, to bring an alternative model up to near the capabilities of the current Riverware modeling software.
- 2. **Schedule delays:** The inevitable delays resulting from redeveloping an alternative model, likely measured in years, would prevent Reclamation managers from being able to provide high-level Bureau officials with the granulated and accurate data that Riverware currently generates in order to support high-level decisions on important water management issues.
- 3. **Re-training challenges**: An alternative modeling program would require the re-training of all Government personnel, which also would require a vast sum of money and which is also currently unavailable.
- 4. **Loss of Overhead Benefit:** Since Riverware is used extensively by both Government and private users, the overhead cost of software support is borne by multiple entities. An alternative modeling software would not likely have that benefit.
- 5. Loss of Cross-Enhancement Benefit: Reclamation and other Riverware customers often benefit from enhancements done to Riverware as requested by other users, both Governmental and private. CADSWES does not charge other users for such improvements.

### 10- List any sources that have expressed interest in this proposed acquisition

In accordance with FAR 5.201(b), a FedBizOpps presolicitation notice was released on 01 February 2010. As of 21 June 2010, no responses have been received.

#### 11- Effort to overcome barriers to competition for future acquisition

Explain what can and will be done to improve our ability to obtain competition for these services or supplies when next required.

a. Source-code Dependent Riverware Requirements: Until CADSWES is willing to accede to making available its proprietary software code to another vendor, which is highly unlikely, there is nothing that the Government can do to improve its ability to obtain competition for these services short of discarding all the benefits accrued through the years from multiple enhancements in the capabilities of the Riverware modeling software. However, as separate software programs that interface as modules with the Riverware program are developed which are not Riverware source-code dependent, they will be evaluated for future competition. Reclamation will ensure that only Riverware source-code dependent requirements are awarded on a sole-source basis. All other requirements will otherwise be competed.

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- b. Consolidation of UC Regional Riverware Requirements: Currently, the Upper Colorado Region has two Riverware contracts: One with the Albuquerque Area Office, which will expire in August 2013; and another with the UC Regional Office's Water Resources Group, which will expire on 02 July 2010. AMD management projects that an IDIQ contract would be put in place by August 2013, which will allow the consolidation of Upper Colorado Regional Riverware requirements.
- c. Consolidation of BOR-wide Riverware Requirements: Currently, management of Riverware requirements for the Bureau of Reclamation is decentralized down to the regional and area office levels. This has resulted in a proliferation of separate procurement instruments being issued for a myriad of Riverware requirements. The ideal goal is to centralize the management of all BOR Riverware requirements, which will require that BOR technical management establish a project/program manager to do so. In turn, this will allow for the subsequent establishment of a BOR-wide contract vehicle to fully realize the consolidation of BOR-wide Riverware requirements.

12- Certification		
Preparer's / requestor's name	Preparer's / requestor's title	
Kent R. Munro	Contracting Officer	
I certify that the information and documentation provided with this requested justification are accurate		
and believe they form a valid basis to proceed with the requested acquisition without full and open		
competition	•	
Jen / Munn	6/21/2010	
Preparer / requestor signature Date		
(Proposed actions \$100k or less, do not require original signature. The request can be transmitted electronically.)		
Approval Requirements (refer to WBR 1406):		
Mark one.		

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## $Subject\ of\ Justification-\textbf{Riverware}\ \textbf{Support}\ \textbf{Services}$

X The requested action is APPROVED:  I certify that this justification is accurate and complete to the best of my knowledge and belief and hereby approve this justification and authorize the action to proceed.	The requested action is <b>DENIED</b> (Explanation is provide below.)	
Contracting Officer's name	K.Dh.	1/- /
<b>Kent R. Munro</b> Approves ≤\$25k; reviews > \$25k	CO signature	6/21/2010 Date
Chief of the Contracting Office's name		
Mike C. Ward  Approves >\$25k, up to \$550k; review >\$550k	Milita Ward CCO signature	Ufune Zero Date
Bureau Procurement Chief's name		
Approves >\$550k, up to \$11.5mln; reviews >\$11.5mln	BPC signature	Date
Head of the Contracting Activity's name		
Approves >\$11.5mln, up to \$57mln; reviews >\$57mln	HCA signature	Date
DOI Senior Procurement Executive's name		
Approves > \$57mln  Explanation of denial:	SPE signature	Date
Explanation of demai.		